

PUBLIC WORKS COUNCIL

March 25, 2021

1. Welcome and Introductions

ACTION ITEMS

2. Meeting Summary

- The Nov. 12th Meeting Summary is available for review.
- The Public Works Council will vote to approve the summary.

3. iSWM Contract Renewal

The Council will vote to renew the iSWM contract with Halff Associates.

- The task order contract is for an initial three (3) year contract with two (2) optional one (1) year renewals. Task Order No. 4 contract will expire on April 30, 2021. The subcommittee has the option to renew this contract for one (1) year.
- iSWM Subcommittee recommends to extend contract for the final (1) one year renewal.
- Work scope to be finalized at the April 2021 meeting. Click [here](#) to view draft work scope.

DISCUSSION ITEMS

4. Water Utility Parts SHARE Contract

- NCTCOG Staff will introduce the new SHARE contract for water utility parts.

5. Public Works Roundup

2021 Public Works Roundup

Grapevine Convention Center

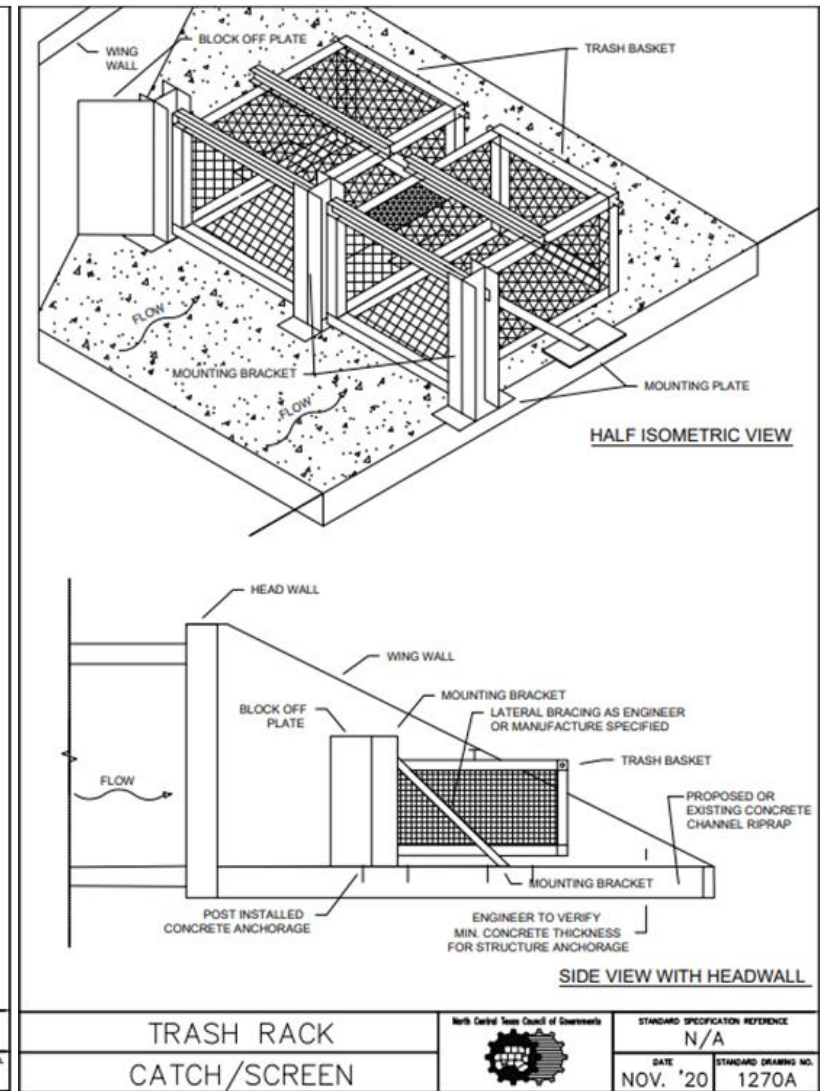
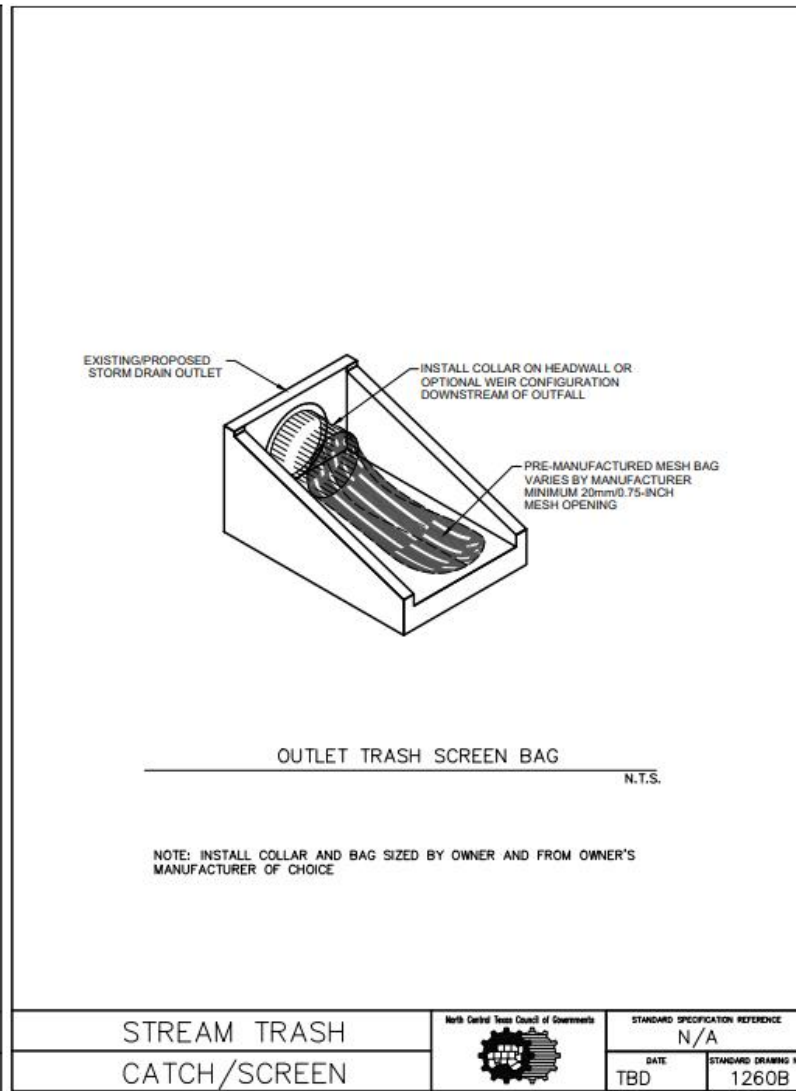
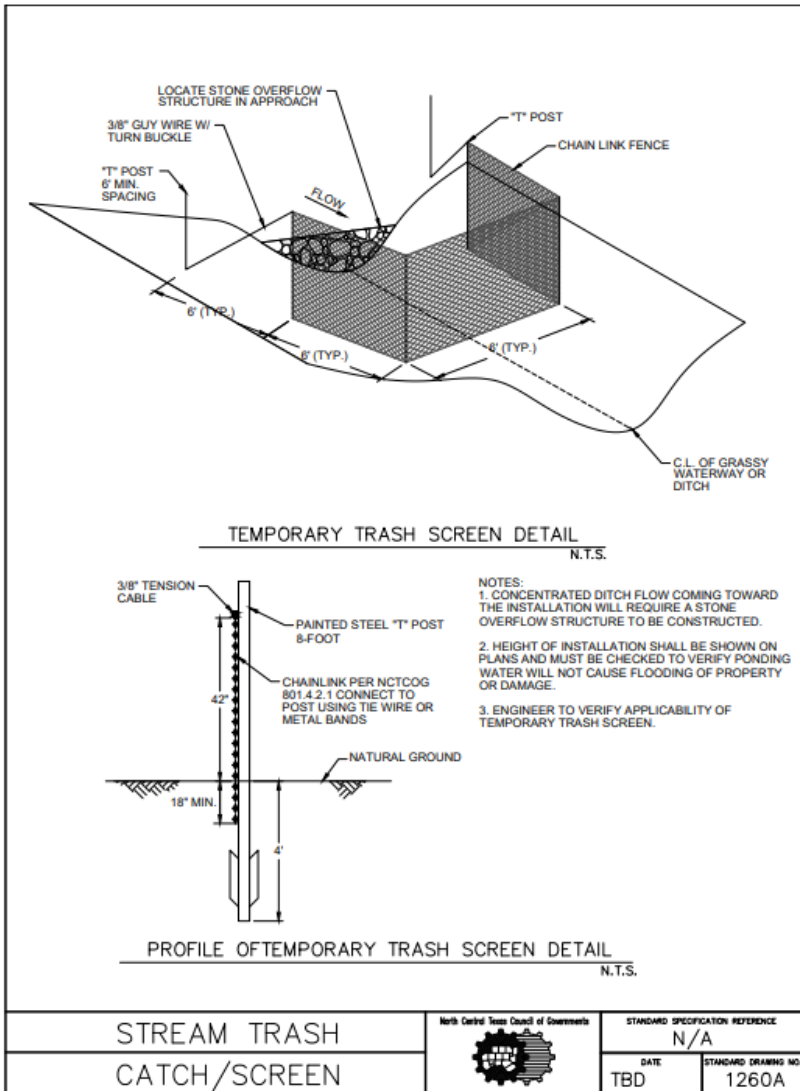
August-September 2021

Mon	Tues	Wed	Thurs	Fri
Aug 9	Aug 10	Aug 11	Aug 12	Aug 13
X	X	X		X
Aug 30	Aug 31	Sept 1	Sept 2	Sept 3
	X	X	X	

A survey will be sent out for topic ideas.



6. Frisco Trash Screen



Trash Screen Details Included in Division 1000

6. Frisco Trash Screen

- In November 2020, the City of Frisco stormwater team installed a Swinging Trash Rack at Woodstream Dr. near Hickory Street in Frisco (Oakbrook Park).
- The park was full of trash and debris from big box stores upstream. 600lbs of trash and debris has been collected/disposed of so far.
- The break-away point in the middle is important, this is the weakest link if the bags are clogged (see photo in next slide).
- Frisco estimated that it cost \$5,000 to build/install this system. It uses disposable laundry bags and designed/built the frames around the dimensions of the bags. There's 8 total on break-away and the frame has a ratchet strap to hold the bags.
- The curb directs low flow to the bags and most of the trash is in the first flush.
- Frisco checks the bags once per week but the bags last about 2 months. When Frisco disposes of the material, they take the bags off, weigh them, and transfer material into a large contractor bag. So far there has been no large trees or logs but lots of thatch and clippings.
- Frisco hand cleans the system, so a close access/disposal point is key.
- This has not resulted in any additional erosion issues so far.

The Council should determine whether to use funds in Task Order 5 of the Halff contract (\$6,624) to create a standard drawing of the Frisco Trash Screen to include in Division 1000.

6. Division 1000 and 3000

- NCTCOG staff sent the updated Division 1000 and 3000 to the Council Feb 12th
- The Standard Drawings Subcommittee made comments and guided edits on the divisions.
- The edits to the divisions were made in house and by Halff Associates as part of the iSWM contract.

NCTCOG is seeking the Council's approval of Division 1000 and 3000

6. Division 1000 and 3000

Approval Process

- Division 2000 and 6000 will be sent to the Council to review in June.
- Division 4000 and 5000 will be sent to the Council to review in July.
- NCTCOG will seek the Council's approval of these 4 divisions at the August 19th meeting.

Publishing Process

- Division 1000 and 3000 will be released in May as an amendment to the 5th Edition.
- Division 2000, 4000, 5000, and 6000 will be released in September as an amendment to the 5th Edition.

INFORMATION ITEMS

8. FY 2020 Public Works Work Program Update

FY 2021 Public Works – Cost Share

We have \$313,605 out of our \$360,000 budget (87%)

Regional Public Works FY21 Cost-Share Participants

- Allen
- Anna
- Annetta
- Arlington
- Azle
- Bedford
- Benbrook
- Carrollton
- Cedar Hill
- Celina
- Cleburne
- Colleyville
- Coppell
- Corinth
- Duncanville
- Edgecliff Village
- Everman
- Euless
- Ferris
- Flower Mound
- Forest Hill
- Fort Worth
- Garland
- Grapevine
- Haltom City
- Hurst
- Irving
- Keller
- Kemp
- Kennedale
- Lewisville
- Little Elm
- Mansfield
- Mesquite
- Mineral Wells
- Murphy
- North Richland Hills
- Pantego
- Plano
- Red Oak
- Rockwall
- Rowlett
- Seagoville
- Watauga
- Weatherford
- White Settlement
- Wilmer
- Wylie
- Denton County
- Hunt County
- Tarrant County
- Wise County

Invoices were mailed out to every city and county in the NCTCOG region on Oct. 1st. If you did not receive your invoice or have questions, please contact Olivia Kale at okale@nctcog.org.

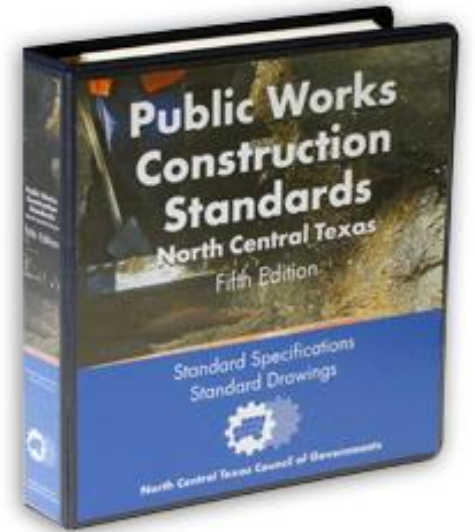
For budgeting purposes, FY22 Cost Shares can be found [here](#).

Standard Drawings Subcommittee

Presented by Keith Marvin

- The Subcommittee has completed reviewing Division 1000, 2000, 3000, and 6000.
- The Subcommittee finished commenting on *Division 4000: Water Distribution* and began *Division 5000: Wastewater Collection*.
- Next Meeting
April 19, 2021 at 10 am
Microsoft Teams

<https://www.nctcog.org/envir/committees/public-works-council/standard-drawings-subcommittee>



Sustainable Public Rights of Way (SPROW)

Presented by Robert Woodbury

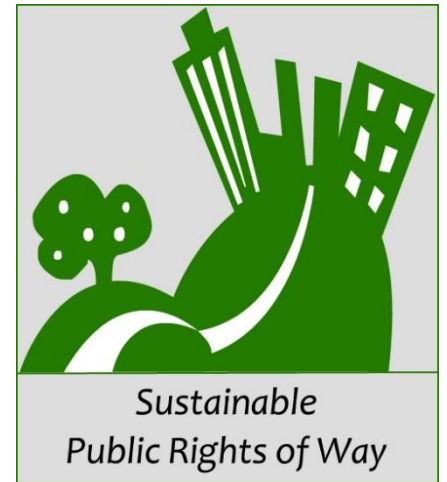
- The Subcommittee met Jan 19, 2021 to discuss the Utility chapter with franchise utility representatives.

Next Meeting

March 30, 2021 at 1:30pm

Microsoft Teams

<https://www.nctcog.org/envir/committees/public-works-council/sustainable-public-rights-of-way-subcommittee>



Integrated Stormwater Management (iSWM)

Presented by Ranjan Muttiah



January 13th, 2021 Meeting updates on Task Order 4

- Subcommittee reviewed the draft task items and provided comments to consultant team. An additional comment period was given to submit comments online by February 15th. Revised documents will be submitted to the iSWM subcommittee before the next meeting.

Task 2: Reorganize/Re-evaluate Site Development Controls

- Update summary pages in the Site Development Controls Manual

Task 3 – Guidance on developing a regional detention program

- Provide data on methods to set up a public/private partnership
- Provide recommendations on when/where regional detention is most appropriate

Task 4 – Detention criteria guidance research

- Research natural channel and volumetric detention guidance in existing criteria manuals to see where iSWM could be improved.

Task 5 – Re-evaluate 85th Percentile (1.5”) Rainfall Requirements

- Reviewing rainfall depths and percentiles that other Texas cities are using to treat water quality.
- Using updated rainfall data to calculate regional percentile storm events.

Integrated Stormwater Management (iSWM)

Presented by Ranjan Muttiah



Task 6: 5-Year Outreach and Implementation Strategy

Part A -Early Stormwater Planning Tools for a Successful Development/Redevelopment Training, December 16, 2020

- PowerPoint: <http://iswm.nctcog.org/training/iSWM-BMP-Training-Slides-2020-12-16.pdf>
- View video: <http://iswm.nctcog.org/training.html#EarlyStormwaterTools>

Part B – Outreach & Implementation Strategy

- Final plan for review at next subcommittee meeting
- Draft iSWM 5-Year Outreach & Implementation Strategy

Task 7: Provide schematics for 5 water quality BMPs to be included in the Site Development Controls

Final schematics will be available at the next subcommittee meeting

All final draft documents from Current Work Scope will be provided to the Public Works Council for approval at the next Council meeting.

Integrated Stormwater Management (iSWM)

Presented by Ranjan Muttiah



iSWM Certification Update

Currently Certified Communities

- City of Denton
- City of Frisco
- City of Fort Worth
- City of Grand Prairie
- City of Irving
- City of Kennedale
- City of Corinth (Newest iSWM Community)

Communities under review

- City of Celina – Gold Certification



ISWM 5-YEAR IMPLEMENTATION AND OUTREACH PLAN UPDATE

ISWM 5-YEAR OUTREACH PLAN

PLAN OBJECTIVES & GOALS

- Increase awareness of iSWM and iSWM principals.
- Identify key agencies, personnel and stakeholders (staff, leadership, elected officials) that need to be engaged through community outreach and with what level of frequency.
- Plan for continuous improvement to the program's technical content and training program.
- Refine the vision and messaging plan to be implemented over the next 5 years.

ISWM 5-YEAR OUTREACH PLAN

IMPLEMENTATION STRATEGIES

- Specific tasks intended to be executed by the iSWM Implementation Subcommittee intended to meet the objectives and goals
- Categories:
 - iSWM Promotion
 - Community Engagement
 - Technical Support and Training
 - Technical Content
- These tasks are prioritized based on their recommended implementation timelines.
 - Short Term (Next 1-3 years)
 - Mid-Term (Next 3-5 years)
 - Long Term (Beyond 5-years)



ISWM 5-YEAR OUTREACH PLAN

iSWM Promotion – enhance iSWM marketing materials

- Case Studies
- Website Updates
- Economic Benefits of iSWM

Community Engagement

- Developer Outreach
 - Engagement with industry/interest groups
- Additional City Council, Education, & Non-profit Outreach



ISWM 5-YEAR OUTREACH PLAN

Technical Support & Training

- Continuation of annual iSWM implementation and BMP training
- Future training for developers

Technical Content

- Continue Site Development Controls Technical Manual Updates
- Additional Technical Manual Updates
- Additional guidance documents



Photo By Mikel Wilkins

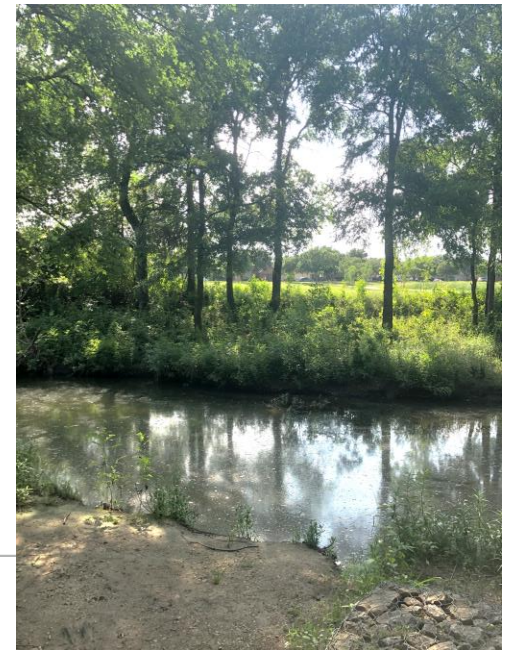
ISWM 5-YEAR OUTREACH PLAN

CHALLENGES

- Lack of regional consistency in requirements
- Retiring advocates of iSWM
- Leadership turnover in communities

EVALUATION OF OUTCOMES

- Participation of iSWM communities and subcommittee participants
- Identification of community advocates and consistent collaboration and outreach.
- Approved initiatives in watershed management programs.
- Tracking of GSI implementation sites
- Quantification of water quality volume treated versus untreated.
- Development of an annual Trinity River Watershed 'Report Card'



Integrated Stormwater Management (iSWM)

Presented by Sydni Ligon



Content has been added to the [iSWM website](#):

Technical Manual

- 2020 Notice of revision highlights changes to following documents.
 - Construction Controls manual – 10 Schematics added.
 - Hydrology Manual – Atlas 14 Memo

Case Studies

- Bioretention Installation and Maintenance Video.

Training

- Site Development Controls Workshop #1 and #2
- Early Stormwater Planning Tools for a Successful Development/Redevelopment Training

Other Documents

- Proprietary Device Memo

Effort to increase iSWM roster members

1. Inviting communities that were part of the founding members to attend IIS meetings or send a representative.
2. Request iSWM Certified Communities join the roster.
3. Have those that attend IIS meetings consistently join the roster

- **Next Meeting:** Thursday, April 21, 2021, at 1:30 pm

[iSWM Subcommittee Webpage](#) for more information on past and future meetings

7. Other Program Activities

- **Cooperative Technical Partnership (CTP) Program**

- **FY18 Projects**

- Flood Risk ID on Marys Creek in Parker County is 97% complete. The flood risk review virtual meeting was held October 2nd. The flood resilience meeting is scheduled for April 6th.

- **FY19 Projects**

- Harriet Creek (Denton County, 7 miles) and Waxahachie Creek (Ellis County, Midlothian, Waxahachie; 19 miles) flood risk identification projects kicked off in April and are ongoing, with survey and hydrologic and hydraulic analyses underway. Waxahachie Creek is 38% complete and Harriet Creek is 44% complete.

- **FY20 Projects**

- NCTCOG received awards for flood risk identification on Catherine Branch (Denton County) and communications and outreach to the northern/western area of the region for integration of transportation and stormwater planning. Both projects are currently kicking off.

- **FY21 Projects**

- NCTCOG submitted a draft business plan to FEMA at the end of December and is currently working with FEMA Region 6 to refine it based on FEMA priorities.

7. Other Program Activities

- **Community Rating System Users Group**

The next North Central Texas Floodplain Administrators/CRS Users Group will be held virtually April 6th, 2021, from 1:00 p.m. to 3:00 p.m. The topic will be the public information program activity (Activity 330). Robert Lemley with Floodproofing.com and Sandra Deshotel with City of Houston will present. A request to TFMA for two CECs is pending.

Register here: <https://www.addevent.com/event/gZ6175339>

Keep up with NCTCOG E&D meetings and events here:

<https://nctcog.org/envir/events>

7. Other Program Activities

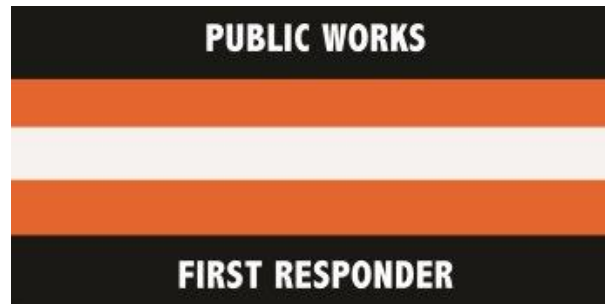
Public Works Emergency Response Team (PWERT) Update

Contact Information:

Barry Fulfer
Chair

Ed Balderas
Vice Chair
EBalderas@rowlett.gov

Alayna Payne
NCTCOG Rep
APayne@nctcog.org





7. Other Program Activities

Texas Chapter of American Public Works Association

- State Chapter Awards – Nominations Due May 7th
- NCTX Sporting Clay Tournament this Spring (TBD) – check website for details
- National Public Works Week – May 16-22
- NCTX Branch Meeting – June 10th TBD
- PWX – Aug. 29 – Sept. 1 in St. Louis
- TX Chapter Annual Conference – Oct. 20-22 in Galveston
- Taking nominations for interested individuals serving on the NCTX Branch Board or Committees. Contact Jim Proce at jproce@annatexas.org

OTHER BUSINESS AND ROUNDTABLE DISCUSSION

8. Future Agenda Items

9. Roundtable Topics/Other Business

NOW, IT'S YOUR TURN...

North Central Texas Organic Waste to Fuel Feasibility Study

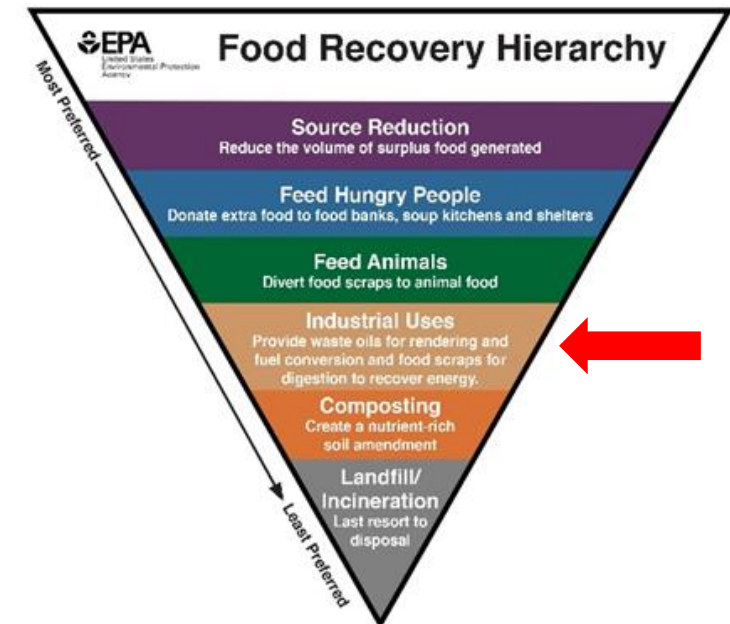
Why is NCTCOG interested in this Topic?

Challenges and Opportunities for North Central Texas

- Retain and Improve Landfill Capacity
 - 36 years of remaining capacity left
- Divert Food Waste and Other Organics
 - 50% of NCT waste stream is organic waste (31% food waste)
- Improve Biosolid Management
- Produce Biogas and Renewable Fleet Fuel
 - Support transition to RNG vehicles
- Reduce Greenhouse Gas and Other Emissions
- Meet zero-waste and other goals



EPA Non-Hazardous Waste Management Hierarchy (Source: EPA)

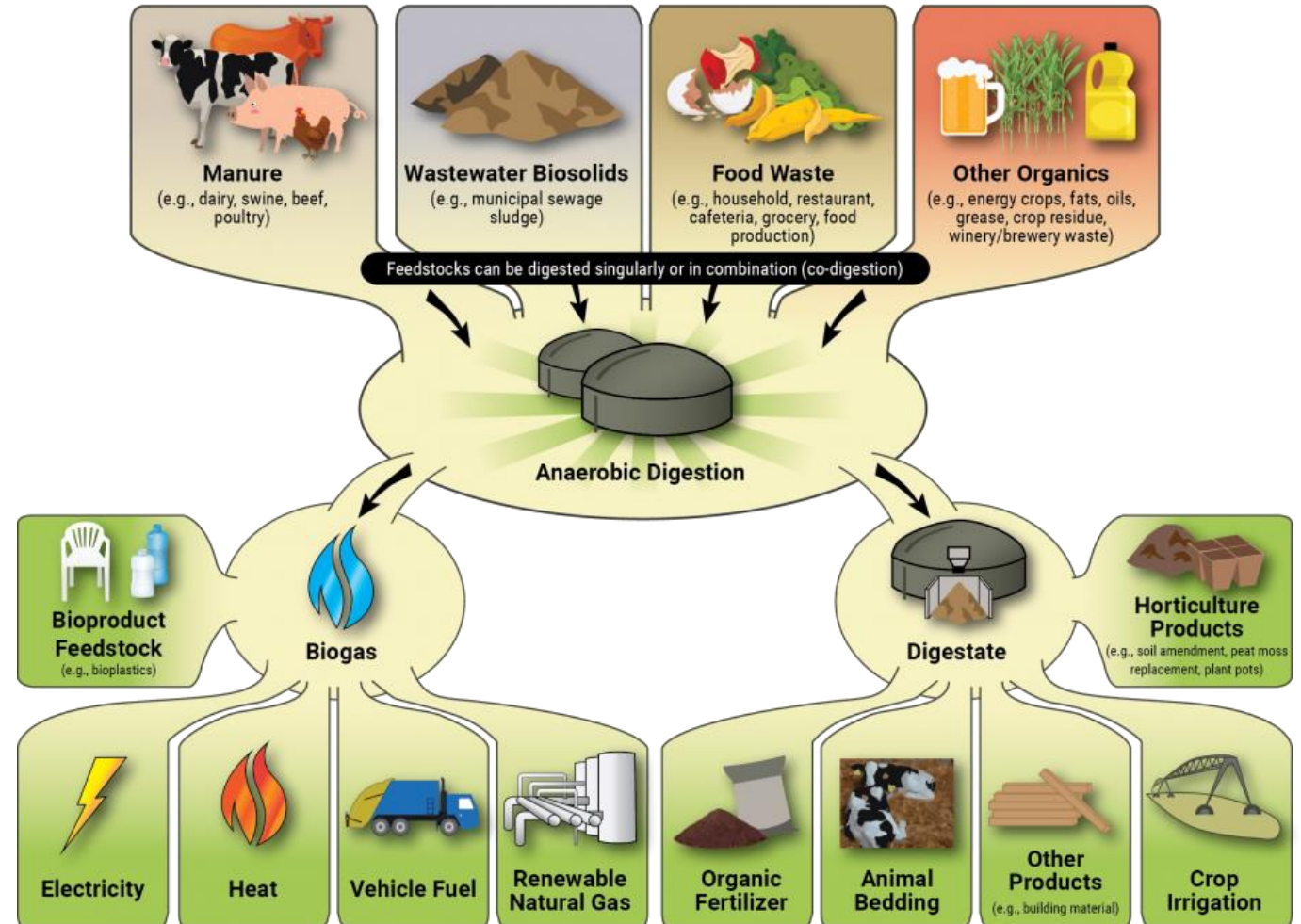


EPA Food Waste Recovery Hierarchy (Source: EPA)

Anaerobic Digestion Process

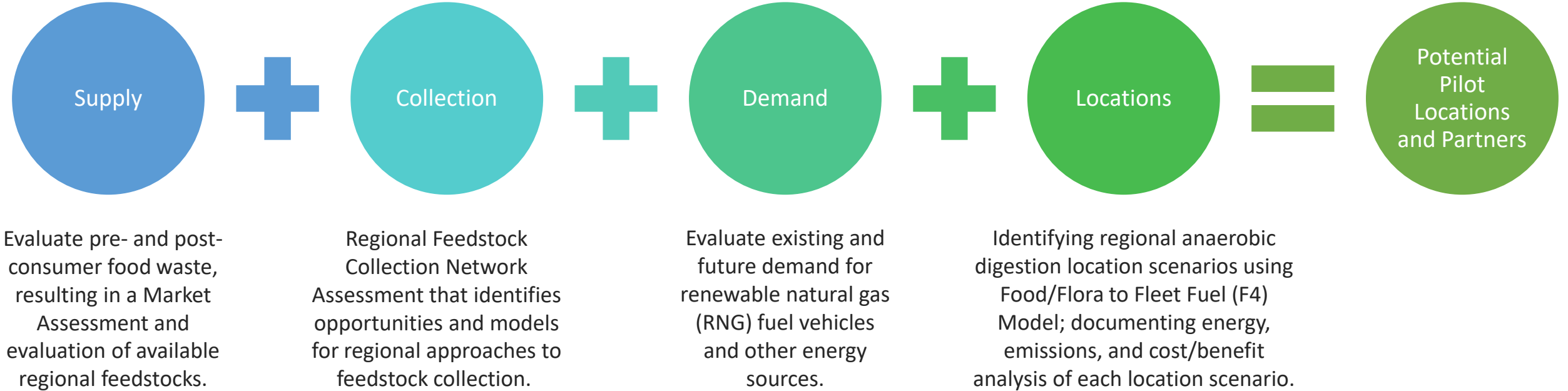
Regional Study Goals:

- Advance regional efforts to divert food waste, and other organics, from landfills to preserve landfill capacity
- Increase regional renewable energy opportunities
- Evaluate the potential to reduce fleet emissions
- Identify pilot projects and partnerships to advance those projects



NCTCOG Continued Efforts

North Central Texas Organic Waste to Fuel Feasibility Study



North Central Texas Organic Waste to Fuel Feasibility Study Updates

- Adjusted the name of this effort to better reflect that all organics, including biosolids from WWTPs, as well as other organic sources will be assessed in a Feedstock Market Assessment and included in scenarios.
- North Central Texas **Organic Waste to Fuel Feasibility Study**
 - Award and initiation of work March 2021
 - Partnership between NCTCOG, DFW Clean Cities, and University of Texas at Arlington
 - Will hire a contractor in the Spring
 - Goal: Identify pilots and partnerships to move projects forward
- **Past Regional Webinars:**
 - December 9, 2020 - Food Waste, Anaerobic Digestion, and RNG Regional Efforts Roundtable ([recording and presentations available here](#))
 - March 24, 2021 – Organic Waste to RNG Regional Roundtable (recording and presentation to be posted here: <http://conservenorthtexas.org/event-archive>).

Next Steps: Establish and Convene Advisory Group with Diverse Stakeholders to Guide Study (March-May 2021)

- Municipalities
- Wastewater Provider
- School District
- Private Sector
- Industry
- Non-profit
- University (UTA) and others as appropriate



North Texas Regional Integration of Sustainability Efforts (RISE) Coalition Purpose

- Align regional partner initiatives
- Leverage regional resources and share best practices
- Provide networking and capacity building opportunities
- Identify funding opportunities for projects
- Provide mentorship
- Collaborate as a group on regional sustainability projects and initiatives

The Fiscal Year 2021 Work Plan serves to establish regional collaborative efforts to engage local governments on a broader scale and foster peer exchange on key topics, including, but not limited to:

- Regional Emissions Assessment
- Emissions Impact Analysis and Mitigation/Adaptation Strategy Development
- Urban Heat Island Reduction Strategy Analysis
- Food Diversion and Waste Reduction Programs



Membership in the RISE Coalition

- Local government members in North Central Texas are invited to join the RISE Coalition.
- Quarterly in-person meetings are posted on the **NCTCOG Environment & Development Events Calendar** and on the RISE Coalition website.
- The Coalition is guided by Bylaws.
- A **Frequently Asked Questions** (FAQ) has been developed to clarify membership options and participation opportunities.
- Please visit the **RISE Membership** page to learn more.
 - <https://www.nctcog.org/envir/development-excellence/rise-coalition/rise-membership>

NCTCOG Regional Greenhouse Gas Emissions Inventory Program

Part 1: Regional Call for Cities to Participate in a Regional Cohort

Licenses will be available for member cities to utilize ICLEI software (ClearPath) to produce their own Greenhouse Gas (GHG) Emissions inventory using the U.S. Community Protocol for Accounting and Reporting of Greenhouse Gas Emissions.

Call for Interested Cities:

www.nctcog.org/trans/quality/air/local-regional-greenhouse-gas-emission-inventory

Opens: March 1, 2021

Closes: April 16, 2021

Requirements: NCTCOG Member City

(preference provided to RISE Coalition member cities)

For more information: Jenny Narvaez,
jnarvaez@nctcog.org, 817-608-2342

Regional Integration of Sustainability Efforts Coalition

www.nctcog.org/envir/development-excellence/rise-coalition



Regional Greenhouse Gas Emissions Inventory (GHG) Program

Part 2: NCTCOG is also conducting a Regional GHG Inventory for the 12-county Metropolitan Planning Area

- Initial step to conducting a GHG Inventory is collecting emissions sources in the region
- NCTCOG is Initiating Data Collection related to Energy, Waste, Water, and Wastewater
 - NCTCOG will be working through existing Federal, State, and Regional data
 - NCTCOG will contact individual cities, counties, special districts to provide needed data to fill gaps

Data Collection to begin March/April 2021

For reference and information, the data points for the regional GHG inventory are included on the next slide. NCTCOG will identify what is already available for the region and will be working to collect the data needed to fill the gaps.

Data Inputs for Individual City GHG Inventories (Part 1) and Regional GHG Inventory (Part 2)

No specific action is requested at this moment. The data points below are for information only. NCTCOG will be determining the appropriate process to collect this data, members who need to respond, and the process to issue surveys to fill identified data gaps for the region.

WASTE	WATER/WASTEWATER	WASTEWATER TREATMENT
Waste Sent to Combustion Facility (per facility) <ul style="list-style-type: none">Tons of WasteFossil CO2 (metric tons)N2O (metric tons)CH4 (metric tons)Biologic CO2 (metric tons)	Electricity Usage and Units	Emissions from Wastewater Treatment Energy Use <ul style="list-style-type: none">Electricity Used and UnitsNatural Gas Used and UnitsVolume of Water Treated and Units (optional)Population Served (optional)
Waste Sent to Landfill (per facility) <ul style="list-style-type: none">Tons of Waste Landfilled	Natural Gas Usage and Units	Emissions from the Combustion of Digester Gas – Site Specific <ul style="list-style-type: none">Calculation TypePopulation ServedGas Production (scf/day)Is energy recovered from combustion?Gas Composition (%CH4) (if applicable)Do you have gas composition or heat content?Heat Content (btu/scf)Wastewater generation and treatment location
Waste Sent to Compost Facility (per facility) <ul style="list-style-type: none">Tons of Waste Composted	Indicators <ul style="list-style-type: none">Water Consumed (million gallons per year) (optional)Population served (optional)	Emissions from the Combustion of Digester Gas – Population Based <ul style="list-style-type: none">Calculation TypeIs energy recovered from combustion?Population ServedWastewater generation and treatment location
Waste Transportation <ul style="list-style-type: none">Tons of WasteRound Trip Distance to Facility (miles)Transport Fuel	Allocation from Treatment System	Emissions from Flaring of Digester Gas <ul style="list-style-type: none">Digester Gas ProducedDestruction EfficiencyPopulation ServedFraction of CH4 in Digester GasWastewater generation and treatment location
Landfills (per facility) <ul style="list-style-type: none">CH4 (metric tons)	Process Intensities <ul style="list-style-type: none">Water ConsumptionWater Gallons per Day per Capita	Nitrification/Denitrification Process N2O from Wastewater Treatment <ul style="list-style-type: none">Nitrification/Denitrification as a step in the treatment processPopulation ServedWastewater generation and treatment locationIndustrial Commercial Discharge Multiplier
Waste Combustion Facilities (per facility) <ul style="list-style-type: none">Fossil CO2 (metric tons CO2)CH4 (metric tons CH4)N2O (metric tons N2O)Biologic CO2 (metric tons CO2)Indicators - Waste Combusted (tons)/Electricity Generated (kWh)	Energy Use <ul style="list-style-type: none">Water Source (ground, surface, etc)Percent of total gallons from sourceGallons from sourceDistribution kWh/million gallonsExtraction kWh/million gallonsTotal kWh/million gallonsConveyance kWh/million gallonsTotal kWhTreatment kWh/million gallons	Process N2Ofrom Effluent Discharge to Rivers and Estuaries <ul style="list-style-type: none">Do you have daily N load data from your effluent discharge?Daily N Load (kg N/day)Population ServedWastewater Generation and Treatment Location
Composting Facilities (per facility) <ul style="list-style-type: none">Amount of Waste CompostedWaste Type		Fugitive Emissions from Septic Systems – Population Based <ul style="list-style-type: none">Calculation TypePopulation Served

FY22-23 Solid Waste Grant Call for Projects

- The NCTCOG allocates a portion of the funding received from TCEQ toward solid waste implementation grants.
- Opens April 7, 2021 and closes May 26, 2021 at 5PM
- Solid Waste Grant webinar will be held on April 8, 2021 at 2PM
 - [Link to Join Meeting](#); The recorded webinar will be posted to the Solid Waste Grant Website
- [NCTCOG Solid Waste Grant Website](#)
- [Grant Application Guidelines](#)
- [Call for Projects Timeline](#)
- Contact Cassidy Campbell at ccampbell@nctcog.org or 817-608-2368 for more information.

All funding for these projects is subject to sufficient funds in the Municipal Solid Waste Disposal Account and to the receipt and availability of funds appropriated by the Texas Legislature for the purposes of this call for projects. In the event funding is not available, NCTCOG has no obligation to provide funding to any projects that may be selected in association with this call for projects.

10. Next Public Works Council Meeting

The next PWC meeting is scheduled for:

Thursday, **May 6, 2021**

9:30 a.m. – 11:30 a.m.

Microsoft Teams

Public Works Staff

EDITH MARVIN, PE, CFM

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